

The Arizona Border Area





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Arizona Border Demographics

- The Arizona border region extends for more than 300 miles, from the town of Yuma in the west to the town of Douglas in the east. The region has an estimated population of approximately 4 million people, and encompasses seven counties. Four of these counties are situated directly adjacent to the border: Yuma, Pima, Santa Cruz, and Cochise. Only the lowermost portions of Maricopa, Pinal and La Paz counties are located in the defined area.



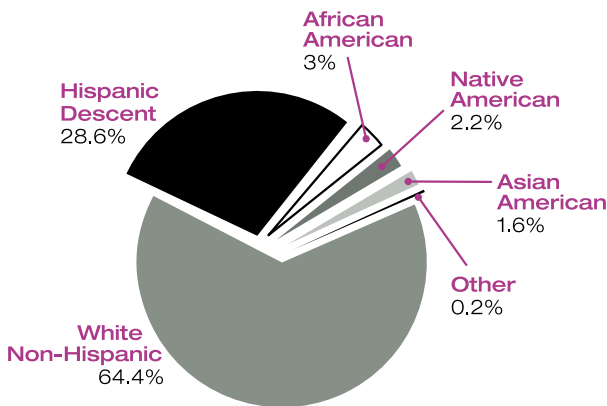
- The main Arizona towns located within the border region include Yuma, Somerton and San Luis (Yuma County), Nogales (Santa Cruz County), Douglas (Cochise County), and Tucson (Pima County).
- Three neighboring U.S./Mexico communities, referred to as “sister cities,” are located along the Arizona/Mexico border: Yuma/San Luis Rio Colorado, Nogales/Nogales, and Douglas/Agua Prieta. The entire U.S./Mexico border includes a total of 12 sister city communities.
- Although five of the seven counties are considered metropolitan areas, the border region is largely rural desert surrounded by mountain ranges. Santa Cruz and Cochise counties are sparsely populated and considered frontier counties.

Rapidly Growing Population

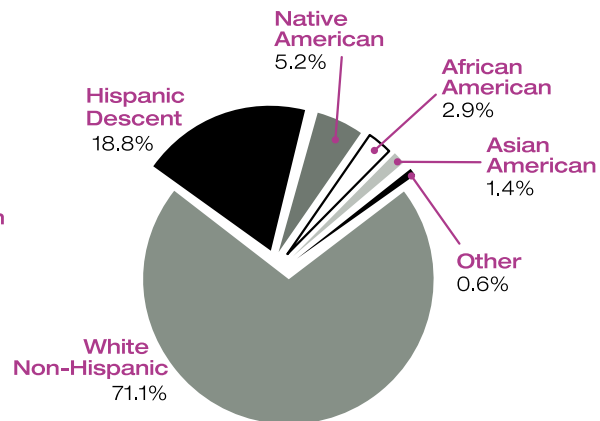
- In recent years there has been considerable migration of retirees to areas such as Santa Cruz County. Other areas, such as Yuma County, experience large fluctuations in populations due to seasonal tourists and migrant farmworkers.
- From 1990-98, the border area's population grew by about 21.5 percent.
- The border birth rate is higher than the rest of the State at 24 births per 1,000 population compared to 15 births per 1,000 population for the State.

Hispanic Population Continues to Grow

- Hispanics of Mexican descent account for about one-fourth of the border population. Yuma and Santa Cruz counties have the highest percentage of Hispanics at 41 percent and 78 percent respectively.
- Four Native Indian tribes reside in the four counties contiguous to the border.



Ethnicity in Border Populations



Ethnicity in Arizona

SOURCE: ARIZONA DEPARTMENT OF HEALTH SERVICES, 1999

Educational Attainment

- In Yuma County, approximately 21 percent of adults over the age of 25 have less than a ninth grade education compared to 9 percent for the rest of the State.
- In Somerton and San Luis, towns adjacent to the border and located in Yuma County, only 9 percent of adults over 25 years of age have completed high school.



Access to Primary Health Care Services

Lack of Health Insurance

- Approximately 28 percent of the Arizona border population is uninsured.
- Among the border states, Arizona has the highest percentage of uninsured residents.

Poverty

- Twenty-three percent of the Arizona border population lives below the poverty level.
- In the Yuma County towns of Somerton and San Luis, 81.2 percent and 80.9 percent respectively live below 200 percent of the poverty level.

Unemployment Rates are Higher

- In 1996, Arizona border counties had unemployment rates twice that of the State and the country. The highest rates are in the towns of Somerton at 28.9 percent, San Luis at 62.2 percent, and Douglas at 16.4 percent.
- Unemployment in areas such as Yuma County can reach up to 40 percent due to large numbers of seasonal farmworkers in the area.

Shortage of Health Care Professionals

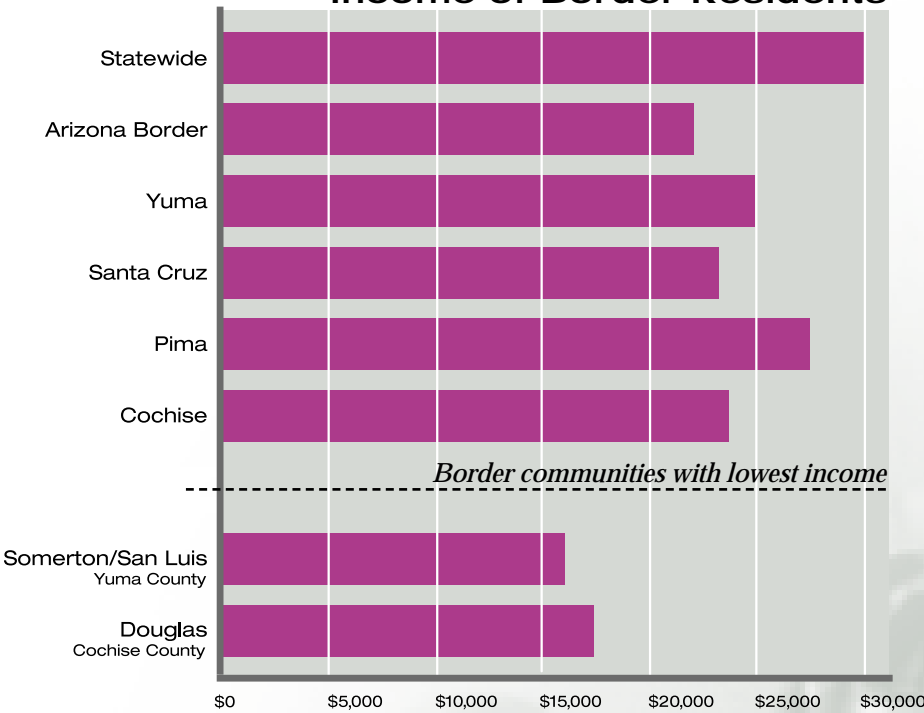
- Santa Cruz County has been designated by the Federal Government as a health professional shortage area (HPSA) for primary health care services, indicating a ratio of less than one health care professional per 3,000 people. All other counties on the border have partial designations.
- All Arizona border counties, with the exception of Cochise, are designated as HPSA for dental services. All counties, with the exception of Santa Cruz, are designated as HPSA for mental health services.
- Douglas County has a physician-to-population ratio of one physician for every 2,579 people compared to the State ratio of one physician for every 1,935 people.
- Other factors that inhibit utilization of traditional health care systems include cultural and linguistic differences, limited clinic hours of operation, limited public transportation, and a lack of Hispanic and American Indian health professionals.

Financial Barriers

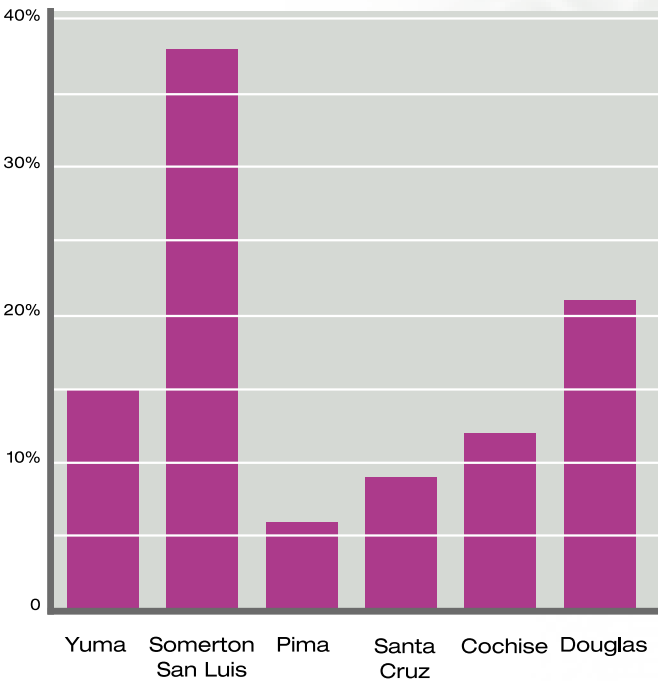
Non-Financial Barriers



Average Median Household Income of Border Residents



SOURCE: PRIMARY CARE AREA
STATISTICAL PROFILES/ABCHI, 1996



Unemployment
is Higher Along
the Border

SOURCE: PRIMARY CARE AREA
STATISTICAL PROFILES/ABCHI, 1996

Health Disparities

- Deaths due to diabetes are slightly higher in the border area compared to the State. The highest death rates are in Yuma and Santa Cruz counties.
- Diabetes is two to three times more prevalent among Mexican-Americans than Non-Hispanic whites.
- Higher rates of micro-vascular complications (damage to small blood vessels) occur among diabetic Mexican-Americans than Non-Hispanic whites.
- People with diabetes are more likely to suffer from damage to the eyes (retinopathy) and kidneys (nephropathy). Nerve damage leading to loss of sensation in the feet also occurs more often among diabetics, putting them at risk for injury, infection, and possibly leading to amputation of the lower limbs.
- Patients with diabetes require ongoing medical care and a high level of self-care. Poverty, low educational attainment, and cultural practices may limit utilization of traditional health systems and adherence to advised medical treatment.

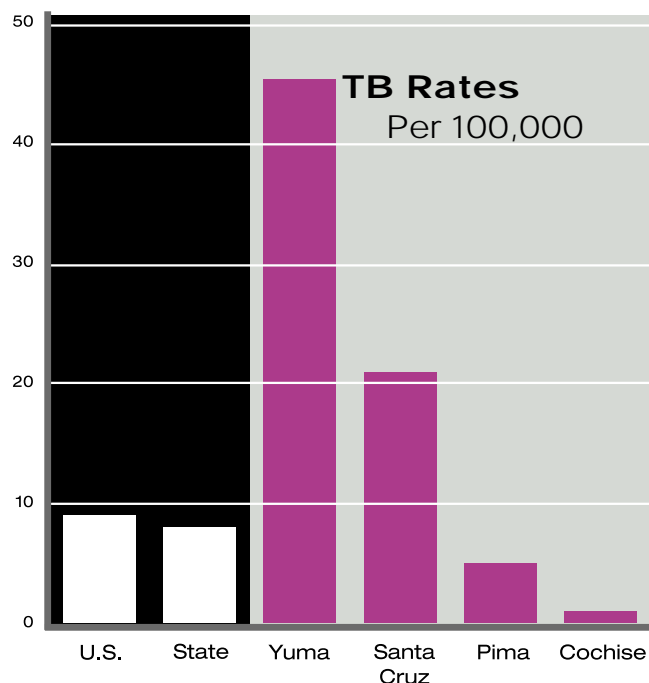
Diabetes

The large Hispanic population contains risk factors known to lead to Type II diabetes, including obesity, overall body distribution of obesity, physical inactivity, and diet.



Tuberculosis

TB rates in the border area are more than three times higher than the State or the country. Counties with the highest rates include Yuma and Santa Cruz.

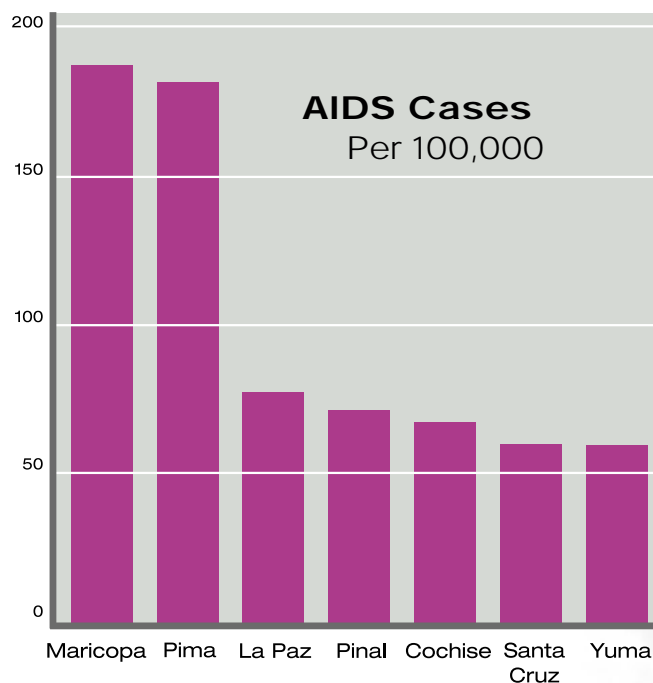


SOURCE: ARIZONA HEALTH STATUS AND VITAL STATISTICS, 1995

- Frequent cross-border travel and movement within the United States makes case finding, treatment, and follow up a challenge for health providers. Care is further hindered by difficulties accessing basic health services and patients interfacing with different health systems as they seek care on both sides of the border.
- Treatment for active TB requires an uninterrupted six-month period of oral medications. Multi-drug resistant tuberculosis (MDRTB) occurs when a patient begins but does not complete the treatment. Treating MDRTB can cost from \$100,000 to \$200,000 per case, which is prohibitive to overburdened health care services and individuals lacking sufficient health insurance.
- The treatment of TB in Mexico differs slightly in that only two types of drugs are used rather than the usual six drugs used in the U.S. This is mainly due to economic reasons.

HIV/AIDS

- Hispanics accounted for 23 percent of reported AIDS cases in Arizona in 1999.
- Among all of the counties in the State, border counties ranked in the top eight for AIDS case rates.
- Maricopa County ranked first with 4,496 cases and a rate of 187 per 100,000 population. Pima County ranked second with 1,360 AIDS cases at a rate of 181 cases per 100,000 population.
- Epidemiological data do not give the total picture of HIV/AIDS in the border area. Many experts believe that considerable under reporting occurs. Contributing factors include the multifaceted barriers to accessing care in the border area, frequent cross-border travel, patients who seek care in Mexico, and issues of culture and confidentiality.
- Effective methods that consider the cultural context and living conditions of border populations are needed to increase awareness and understanding of the prevention of HIV/AIDS transmission.



Child Health

Uninsured

- Children account for an estimated 29 percent of the uninsured population in the Arizona border region.
- More than one-third of children who are eligible for Medicaid but are not enrolled live in families where one or both parents are immigrants. More than 70 percent of immigrant children are Hispanic. Language barriers contribute to the low enrollment rate in Medicaid.

Vaccine Preventable Illnesses

- Border counties have some of the lowest immunization coverage rates in the State. Santa Cruz County has a coverage rate of 67 percent, and Pima County has a rate of only 40 percent compared to an immunization coverage rate of 72 percent for the State.
- Communities along the Arizona border with low coverage rates include Douglas (Cochise County) at 65 percent, Nogales (Santa Cruz County) at 67 percent, and Somerton/San Louis (Yuma County) at 64 percent.

Infant Mortality

- The infant mortality rate in Cochise County is significantly higher than the State at 12.5 deaths per 1,000 live births compared to 7.6 deaths per 1,000 live births for the State.

Lead Exposure

- In 1996, Yuma, Pima, and Maricopa counties accounted for 89 percent of the 288 lead-related cases reported Statewide. Of those cases, 66 percent were identified as Hispanic children.
- Children under six years of age are highly sensitive to lead exposure, which can cause serious and irreversible damage to the developing brain and central nervous system. Severe exposure can cause coma, convulsions, and death, while lower levels of exposure can cause learning disabilities, hearing problems, and behavior problems.
- Sources of lead exposure include paint, ceramics, pottery, folk remedies, and lead sources carried to the home via work clothing.

Environment

Pesticide Spraying Causes Illness

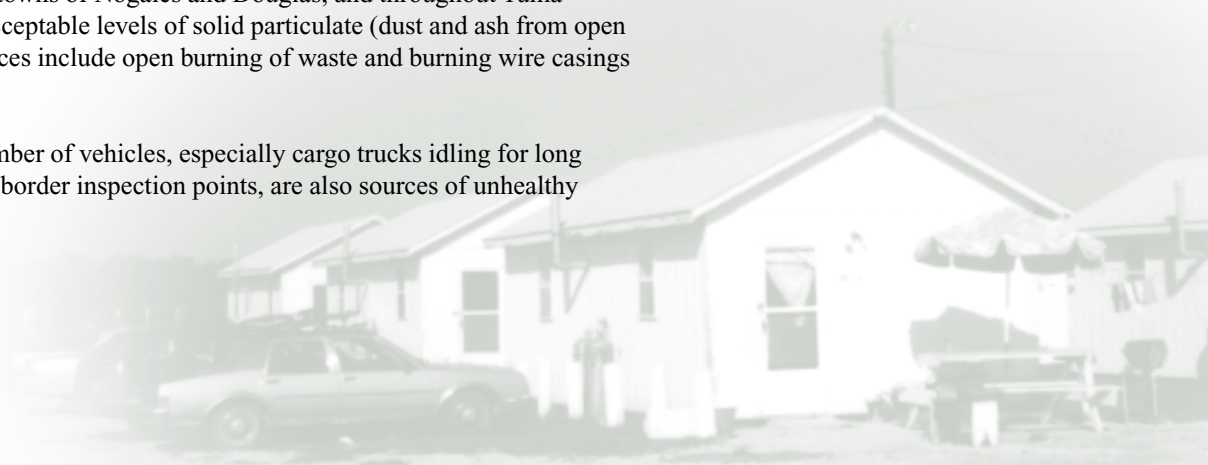
- Pesticide-related illnesses are important concerns in Yuma County, a large agricultural area where aerial spraying of pesticides occur year round. The potency of pesticides may last several days after spraying, and can drift into neighboring communities. Exposure can also occur through contact with contaminated clothing.
- Illnesses from pesticide exposure can be difficult to diagnose, the symptoms may be nonspecific, and often imitate other medical conditions. Long term effects of exposure are not well understood, although the reproductive systems may be vulnerable to chronic exposure.

Water Pollution

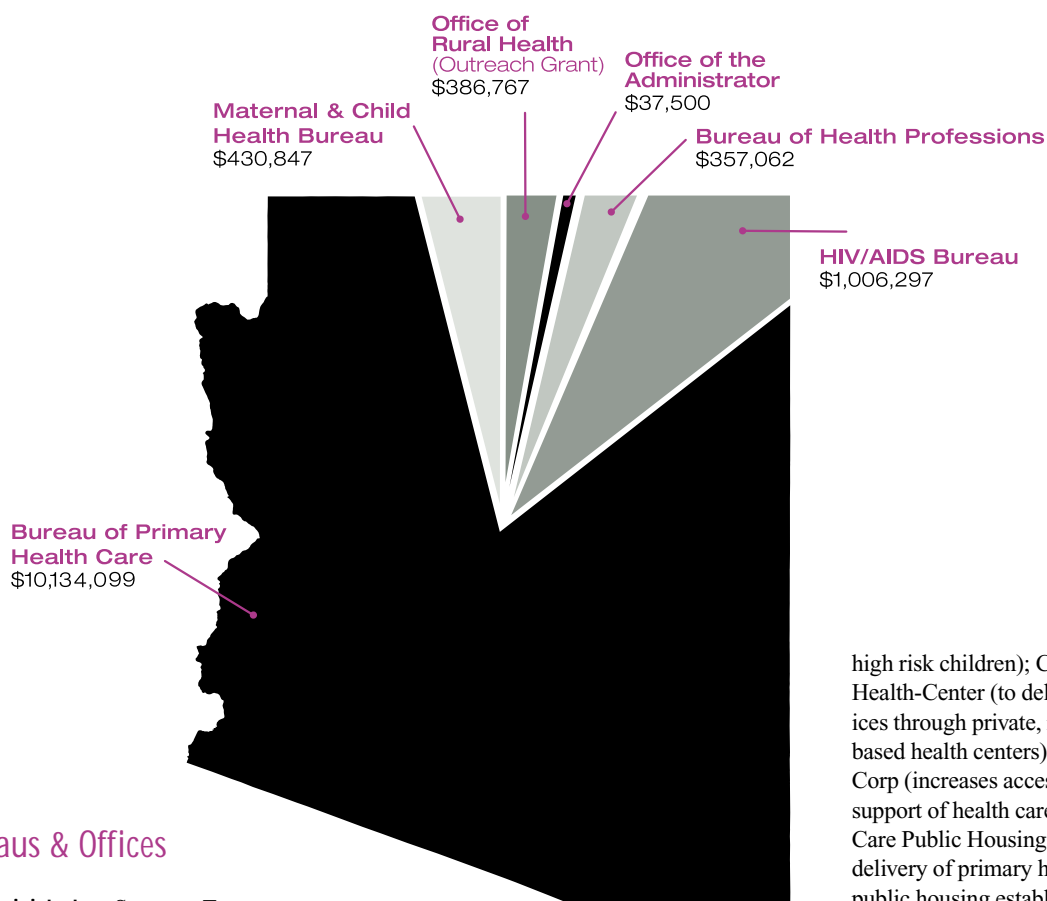
- High levels of fecal bacteria, ammonia, heavy metals, and parasites have been found in the Nogales Wash river, threatening the health of nearby residents.
- The San Pedro River in Naco, Arizona has a lead level 35 times higher than considered safe by the Federal Government. The San Pedro River's arsenic level is five times above the Federal limit. In addition, high lead levels have also been found in the soil near Douglas.

Air Pollution

- Air quality in the towns of Nogales and Douglas, and throughout Yuma County, exceed acceptable levels of solid particulate (dust and ash from open air burning). Sources include open burning of waste and burning wire casings for recycling.
- An increasing number of vehicles, especially cargo trucks idling for long periods of time at border inspection points, are also sources of unhealthy emissions.



HRSA Resources in the Arizona-Mexico Border Area



HRSA Bureaus & Offices

Office of the Administrator: Supports Ten Against TB, a binational partnership program among the four U.S. States and six Mexican States along the border to decrease the spread of tuberculosis through activities such as direct observed therapy and standard protocols.

Office of Rural Health: (Outreach Grant) Assists rural communities rebuild their health care services by supporting initiatives such as improving recruitment and retention of health professionals and demonstrating innovative models to address rural health problems. Outreach demonstration grants support delivery of health services through health education and promotion activities and other related services.

Bureau of Health Professions: Includes Nurse Practitioner/Nurse Midwife Training; Border Health Education & Training Centers; Health Careers Opportunities Program (to assist disadvantaged students in completing health professional studies); and Centers of Excellence (to assist eligible schools in supporting health professional programs for underrepresented minority students).

HIV/AIDS Bureau: Includes the Ryan White Title I (emergency assistance to qualified metropolitan areas for local planning councils and various services including primary care, and emergency financial case management); Title II (funding provided to States, AIDS Drug Assistance Program, and activities including home health insurance continuation and regional HIV care consortia); Title III (early intervention services, direct outpatient health services, and planning activities); Title IV (funding for Women, Children, Youth & Families, and Access to Research programs); and Special Programs of National Significance SPNS (demonstrations of innovative models of health and support for individuals with HIV).

Bureau of Primary Health Care: Includes Health Care for the Homeless (to coordinate and deliver health care services using a multi-disciplinary approach to homeless individuals); Healthy Schools/Healthy Communities (to promote school-based health centers for providing comprehensive health services to

high risk children); Community/Migrant Health-Center (to deliver primary health services through private, non-profit community-based health centers); National Health Service Corp (increases access through placement and support of health care providers); Primary Care Public Housing (to increase access to delivery of primary health care services at public housing establishments or other nearby locations); Border Vision Fronteriza (a three year demonstration project to increase access to primary health services through outreach and community education services utilizing lay health workers); and Data Infrastructure Contract (a three year demonstration contract to address issues of collecting health-related data and sharing information among entities in the border area).

Maternal & Child Health Bureau: Includes Title V Block Grants awarded to state governments to provide maternal and child health services such as prenatal care, school health, direct care and enabling services. Other various MCHB funds have been awarded to universities, community health centers, county health departments, and community coalitions in Arizona to facilitate outreach, teen abstinence, emergency medical services for children, provider training, dental sealant for children. There is also a Border Healthy Start infant mortality reduction planning project (the State's Arizona Cost Containment Ctr. is the grantee), as well as another Healthy Start project in the Phoenix area by the same grantee.

Sources for More Information

HRSA Border Health Unit
Bureau of Primary Health Care
Division of Programs for Special Populations
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Bethesda, Maryland 20814
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Website: <http://www.bphc.hrsa.gov/borderhealth>

HRSA Office of Field Operations
Room 11-25
5600 Fishers Lane
Rockville, Maryland 20857
Phone: 301-443-7070; Fax: 301-443-2173

HRSA Border Health Program
San Francisco Field Office-Border Health Coordinator
Federal Office Building, 50 UN Plaza
San Francisco, California 94102
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Phone: 619-692-5510; Fax: 619-692-8020

Environmental Protection Agency, Border XXI
National Health & Environmental Effects Research Laboratory MD 87
Research Triangle Park, North Carolina 27711
Phone: 919-541-2283; Fax: 919-541-4201

Centers for Disease Control and Prevention
Office of Global Health
4770 Buford Highway, N.E., MS-KO1
Atlanta, Georgia 30341-3724
Phone: 770-488-1072; Fax: 770-488-1004

Pan American Health Office
El Paso Field Office
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El Paso, Texas 79912
Phone: 915-581-6645; Fax: 915-833-4768

Arizona Department of Health Services
Border Health Office
3815 North Black Canyon Highway
Phoenix, Arizona 85015
Phone: 602-230-5808; Fax: 602-230-5959

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